

**Abstract**

A method of run-time tracing is performed on a computer while running an executable software program. The method includes processing data by the processor of the computer, storing the data in a memory of the computer, and controlling the step of processing data so that the step executes function routines of the language of the software program. Trace points are associated with the function calls of the program. The function calls execute the applicable function routines of the program language. The method also includes capturing trace information in memory. The method further includes associating that trace information with trace id's that uniquely identify each of the trace points of the program. The trace points are incorporated in executable versions of the program. The memory in which the trace information is captured is a shared memory accessible to the computer and other connected devices. The shared memory is either part of the computer or separate but communicatively connected memory such as a networked element. The shared memory includes the most recent trace results from runs of the program, as well as all past results that have not been overwritten, even though more than one computer that executes the program can access and share the shared memory.